UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
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ART UNIT	PAPER NUMBER
2164	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/665,140	MOCHIZUKI, NAOKI
	Examiner	**Art Unit**	
	Charles D. Adams	2164	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *15 June 2007*.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *2,3,6-13 and 15-19* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *2-3, 6-13 and 15-19* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

SAM RIMELL
PRIMARY EXAMINER

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Remarks

1.   In response to communications filed on 15 June 2007, claims 2, 3, 6, and 7 are

amended, claims 1, 4-5, and 14 are cancelled, and claims 15-19 are added per

applicant's request. Claims 2-3, 6-13, and 15-19 are pending in the application.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 6-7 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Akagi (US Patent 6,931,421) in view of Tipirneni (US Pre-Grant Publication

2004/0257608).

        As to claim 6, Akagi teaches:

        A local database for storing and managing said examinational information data

(see Figure 1 and 4:74-50); and

        Comparing means for comparing examinational information data newly read from

said server and examinational information data that have already been stored in said

local database with each other, and storing the newly read examinational information

data into said local database only when the newly read examinational information data

have not been stored (see 5:45-49. The server is element 10 in Figure 1. The local

database is contained in element 20, the radiographic apparatus);

A terminal connected to said communication link for receiving and outputting

examinational information data that have been stored in said server when the medical

imaging apparatus is used (see 4:40-46); and

Akagi does not teach:

A communication monitoring device connected to said communication link for

logging communication data transmitted between said terminal and said server,

Wherein said communication monitoring device transmits the examinational

information data to said data processing apparatus when said communication

monitoring device detects reception by said terminal of said examinational information

data from said server.

Tipirneni teaches:

A communication monitoring device connected to said communication link for

logging communication data transmitted between said terminal and said server (see

paragraph [0038], Figure 10, step 352),

Wherein said communication monitoring device transmits the examinational

information data to said data processing apparatus when said communication

monitoring device detects reception by said terminal of said examinational information

data from said server (see paragraphs [0038]-[0039] and [0041]. The user at the

terminal chooses a patient record (examinational information) to examine after receiving

a list of patient records. The WEBSTAR service will transmit the chosen examinational

information to the GETPATIENT.ACGI for processing).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to have modified Akagi by the teaching of Tipirneni, since

Tipirneni teaches that "a medical facility may not have the financial resources or patient

volume to support a physician on site at all times; the medical facility may be located in

a remote location; or a town may not have a sufficient number of physicians available to

be located at each medical facility at all times of the day. As such, when a patient

requires medical attention, an experienced physician may not be readily available at a

particular medical facility. Accordingly, a system is needed which acquires an image of

a patient and transmits the image to a remote location for viewing and analysis by an

experienced physician (see paragraph [0006]).

As to claim 7, Akagi teaches:

A local database for storing and managing said examinational information data

(see Figure 1 and 4:74-50); and

Comparing means for comparing examinational information data newly read from

said server and examinational information data that have already been stored in said

local database with each other, and storing the newly read examinational information

data into said local database only when the newly read examinational information data

have not been stored (see 5:45-49. The server is element 10 in Figure 1. The local

database is contained in element 20, the radiographic apparatus);

A terminal connected to said communication link for receiving and outputting

examinational information data that have been stored in said server when the medical

imaging apparatus is used (see 4:40-46); and

Akagi does not teach:

A communication monitoring device connected to said communication link for

monitoring data communications between said terminal and said server,

Wherein said communication monitoring device sends a command to said server

to copy predetermined data included in the examinational information data stored in

said server to said local database when data communications between said terminal

and said server are detected.

Tipirneni teaches:

A communication monitoring device connected to said communication link for

monitoring data communications between said terminal and said server (see paragraph

[0038]),

Wherein said communication monitoring device sends a command to said server

to copy predetermined data included in the examinational information data stored in

said server to said local database when data communications between said terminal

and said server are detected (see paragraph [0041]).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to have modified Akagi by the teaching of Tipirneni, since

Tipirneni teaches that "a medical facility may not have the financial resources or patient

volume to support a physician on site at all times; the medical facility may be located in

a remote location; or a town may not have a sufficient number of physicians available to

be located at each medical facility at all times of the day. As such, when a patient

requires medical attention, an experienced physician may not be readily available at a

particular medical facility. Accordingly, a system is needed which acquires an image of

a patient and transmits the image to a remote location for viewing and analysis by an

experienced physician (see paragraph [0006]).

As to claim 11, Akagi as modified teaches wherein the communication monitoring

device is connected to the server via the communication link (see Akagi 4:35-46 and

Figure 1).

As to claim 12, Akagi as modified teaches wherein a log of data transmitted

between the server and the terminal becomes transmitted to the comparing means of

the data processing apparatus (see Akagi 5:44-49. A log of data transmitted between

the server and the terminal (the patient list) is sent to the comparison means), and

wherein the data processing apparatus stores the examinational information data into

said local database only when the newly read examinational information data from said

log have not been previously stored (see Akagi 5:44-49).

As to claim 13, Akagi as modified teaches wherein the log of data includes

examinational information comprising at least one of a patient's acceptance number,

patient name; patient ID, examination department, and imaging technician (see <u>Akagi</u>

6:35-38 and Figures 4(a)-4(c)).

4.   Claims 8, 9, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable

over <u>Akagi </u>(US Patent 6,931,421), in view of <u>Tipirneni</u> (US Pre-Grant Publication

2004/0257608), and further in view of <u>White et al</u>. (US Pre-Grant Publication

2004/0019501).

        As to claim 8, <u>Akagi</u> as modified teaches the system of claim 6.

        <u>Akagi</u> as modified does not teach wherein the medical imaging apparatus sends

an end imaging signal to the server, and when the server receives the end imaging

signal, the server automatically deletes examinational information data for a

corresponding image.

        <u>White et al</u>. teaches wherein the medical imaging apparatus sends an end

imaging signal to the server, and when the server receives the end imaging signal, the

server automatically deletes examinational information data for a corresponding image

(see paragraphs [0057]-[0059]. The radiologist can return a report to a transcriptionist,

in which case it is deleted from the radiologist's queue. This can be an "end imaging

signal", as the radiologist may be done "reviewing the test film" (see paragraph [0057])).

        Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to have modified <u>Akagi</u> by the teaching of <u>White et al</u>.,

since <u>White et al</u>. teaches that "the system is most advantageously applied in the

context of a medical testing process that involves a series of steps. The system

provides special benefits in a clinical context where the clinic is charged with performing

diagnostic testing of a large volume of patients, and the steps in the testing process are

performed by multiple staff members" (see paragraph [0029]). In addition to this, it

would also have been obvious to remove a patient from the "patient list" queue of Akagi

once their scheduled imaging is done.

As to claim 9, Akagi as modified teaches wherein said data processing apparatus

further comprises a periodic reading means, which reads automatically examinational

information data from the server depending on a frequency of forming images

performed by the medical imaging apparatus (see 5:15-19 and 5:50-6:2. The period can

be set to not update when the frequency of periods when imaging does not occur).

As to claim 18, Akagi teaches wherein deleting the examination information data

free memory space in the server (see White et al. paragraphs [0057]-[0059]. It is well

known to one of ordinary skill in the art that removing an element from a queue will free

space in the queue. As the queue is contained in a server, removing an element from a

queue will 'free memory space in the server').

5.   Claims 2, 3, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Akagi (US Patent 6,931,421) in view of Banks et al. (US Patent 6,603,494).

As to claim 10, <u>Akagi</u> teaches:

A server for storing and managing examinational information data (see Figure 1, element 10. Also see 4:40-46)

<u>Akagi</u> does not teach for identifying an image obtained by a medical imaging apparatus,

<u>Banks et al.</u> teaches for identifying an image obtained by a medical imaging apparatus (see 15:16-27).

<u>Akagi</u> as modified teaches:

A data processing apparatus (see <u>Akagi</u> element 20 of Figure 1) for merging data of the image obtained by said medical imaging apparatus and the examinational information data from said server into data in a predetermined format (see <u>Banks et al.</u> 15:16-27), said server and said data processing apparatus being connected to each other by a communication link (see <u>Akagi</u> Figure 1),

Said data processing apparatus comprising:

A local database (see <u>Akagi</u> Figure 1 element 21) for storing and managing said examinational information data; and

Comparing means (see <u>Akagi</u> 5:44-49) for comparing examinational information data newly read from said server and examinational information data that have already been stored in said local database with each other, and storing the newly read examinational information data into said local database only when the newly read examinational information data have not been stored (see <u>Akagi</u> 5:44-49).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Akagi by the teaching of Banks et al., since Banks et al. teaches "technologists particularly benefit from the remote services provided. Technologists can control the imaging device remotely, access information remotely, and store information remotely. In this manner, for example, technologists have scheduling tables and information more readily available" (see 24:47-52). In addition to this, Banks et al. teaches "based on the common processes, sub-processes and parameters a set of interface screens have been developed which, despite use with each of the modalities, have many identical characteristics which are recognizable and foster a comfortable feeling, even for a technologist using a system for the first time" (see 9:45-50).

As to claim 2, Akagi as modified teaches:

Periodically data reading means for periodically reading said examinational information data from said server (see 5:15-19).

As to claim 3, Akagi as modified teaches:

List displaying means for displaying, on a display unit, a list of examinational information that is produced by merging examinational information data newly read from said server and examinational information data that have already been stored in said local database (see 4:51-53 and Figure 2).

6.   Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Akagi (US Patent 6,931,421) in view of Banks et al. (US Patent 6,603,494), and further

in view of Rothschild et al. (US Pre-Grant Publication 2002/0016718).

        As to claim 15, Akagi as modified teaches the system of claim 10.

        Akagi as modified does not teach wherein the predetermined format is the

DICOM standard.

        Rothschild et al. teaches wherein the predetermined format is the DICOM

standard (see paragraph [0144]).

        Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to have modified Akagi by the teaching of Rothschild et al.,

since Rothschild et al. teaches that "a computer is needed to convert the proprietary

image identification data (the header information) into a standardized format, such as

DICOM" (see paragraph [0008]).

        As to claim 16, Akagi et al. as modified teaches wherein the medical imaging

apparatus outputs data in a non-DICOM format (see Rothschild et al. paragraph [0144]

and paragraph [0008]: "non-DICOM enabled models represent the majority of imaging

machines. Due to financial constraints imposed by managed care on imaging centers,

non-DICOM machines will continue to dominate diagnostic imaging for the foreseeable

future".

As to claim 17, Akagi as modified teaches wherein the predetermined format is stored in the local database (see Rothschild et al. paragraph [0152]).

7.   Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Akagi (US Patent 6,931,421) in view of Tipirneni (US Pre-Grant Publication 2004/0257608), and further in view of Rothschild et al. (US Pre-Grant Publication 2002/0016718).

As to claim 19, Akagi as modified teaches the system of claim 6.

Akagi does not teach wherein the communication monitoring device monitors image acquisition activity between the terminal and server.

Rothschild et al. teaches wherein the communication monitoring device monitors image acquisition activity between the terminal and server (see paragraph [0070]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Akagi by the teaching of Rothschild et al., since Rothschild et al. teaches that "Thus healthcare providers using the system have a degree of image management that has never been possible before with film" (see paragraph [0211]).

Response to Arguments

8.   Applicant's arguments filed 15 June 2007 have been fully considered but they are not persuasive.

Applicant argues in regards to claim 10 that "it is clear that the memory elements
21, 22 of the cited apparatus 20 only stores the scheduling information for the
radiographing process. There is no teaching that any medical imaging information is
stored to either memory 21, 22". In response to this argument, Examiner notes that the
claims are limited to "examinational information data for identifying an image obtained
by a medical imaging apparatus". In addition to this "scheduling information" is "medical
imaging information", as the "scheduling information" defines when medical imaging is
to take place, with whom, and for what reason. It is also noted that Examiner relies upon
Akagi, in view of Banks et al., to teach wherein the examinational information is used to
identify an image obtained by a medical imaging apparatus.

Applicant argues that "there is no teaching in Akagi that such a merger is ever
made". In response to this argument, Examiner notes that Banks et al. is relied upon to
teach merging the image obtained by said medical imaging apparatus and the
examinational information data from said server into a predetermined format (see Banks
et al. 15:16-27). Examiner also notes that, in regards to Applicant's arguments about
memory limitations of Akagi, that Banks et al., which is relied upon to teach merging,
has no such limitations. It is also noted that it would have been obvious to one of
ordinary skill in the art to increase memory if necessary.

Applicant argues that Figure 6 of Banks et al. "merely illustrates a generic patient
information icon. This icon is not capable of providing examinational information for

identifying the image. Rather, the generic icon is used as a tab to input the attributes of

a patient during the patient information entry phase of the process". It is noted that

"examinational information" includes "patient information". Applicant argues that "it is

clear that the data is not merged into a predetermined format, since they are clearly on

separate displays. To the extent that the data may be associated, there is no merger

into a predetermined format". In response to this argument, Examiner notes that the

medical images displayed on Figure 6 includes an identification of the exam, "C-

SPINE". It is also noted that the patient information is available on the same screen as

the medical images, thus they are merged.

Applicant argues the Examiner's motivation. In response to this argument, the

Examiner notes that, in claim 10, the information received by the data processing

apparatus is remotely transmitted from a server and a medical imaging apparatus, both

of which are connected by a communication link to a data processing apparatus.

Applicant argues, in regards to claim 6, that "the logging of claim 6 relates to

information on the image acquisition portion. By contrast, WEBSTAR in Tipireni relates

to the image distribution portion for the system". It is noted that no such distinctions

appear in the claimed subject matter. Neither claim 6 or claim 7 note that the claim is

limited to "image acquisition" and not "image distribution". In addition to this, the

difference between "image acquisition" and "image distribution" is based a particular

point of reference. For example, the doctor's terminal acquires examinational

information from an internet server. At the same time, the internet server distributes

information to the doctor's terminal.

In regards to claim 8, applicant argues that "the deletion from a queue causes its

redistribution to another queue in the same application. Therefore, the examinational

information is not deleted from the server". In response to this argument, the Examiner

notes that the claim reads only "deletes examinational information data for a

corresponding system". Therefore, "deletion from a queue" is sufficient to meet this

limitation.

Conclusion

9.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles D. Adams whose telephone number is (571) 272-3938. The examiner can normally be reached on 8:30 AM - 5:00 PM, M - F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571) 272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Charles Adams
AU2164

SAM RIMELL
PRIMARY EXAMINER